

Title (en)  
LOW ENERGY SO2 SCRUBBING PROCESS

Title (de)  
NIEDRIGENERGIE WASCHVERFAHREN FÜR SO2

Title (fr)  
PROCEDE D'EPURATION DE SO2 A FAIBLE CONSOMMATION D'ENERGIE

Publication  
**EP 1654052 B1 20080423 (EN)**

Application  
**EP 04737894 A 20040625**

Priority  
• CA 2004000955 W 20040625  
• US 63967803 A 20030813

Abstract (en)  
[origin: US2005034600A1] Sulphur dioxide is removed from gas streams by contacting the gas stream with an absorbing medium containing an amine capable of forming an amine salt, heat stable salt and sulfite. The level of heat stable salt is selected such that during the regeneration process of the sulphur dioxide rich amine, the pH of the absorbing medium is at a selected level or below when the level of sulfite in the absorbing medium has been reduced to a specified value. The amine that absorbs the sulphur dioxide has a pKa less than that of sulfite. If the absorbent includes a diamine, then the spent absorbing medium is regenerated under conditions such that at least one amine group remains in salt form.

IPC 8 full level  
**B01D 53/50** (2006.01); **B01D 53/14** (2006.01)

CPC (source: EP US)  
**B01D 53/1481** (2013.01 - EP US); **B01D 53/1493** (2013.01 - EP US); **Y02A 50/20** (2017.12 - US)

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**US 2005034600 A1 20050217; US 7214358 B2 20070508**; AT E392941 T1 20080515; AU 2004264999 A1 20050224;  
AU 2004264999 B2 20090917; BR PI0413459 A 20061017; BR PI0413459 B1 20130723; CA 2534879 A1 20050224; CA 2534879 C 20090324;  
CN 100518887 C 20090729; CN 1780678 A 20060531; DE 602004013333 D1 20080605; DE 602004013333 T2 20081127;  
EA 008803 B1 20070831; EA 200600394 A1 20060825; EP 1654052 A1 20060510; EP 1654052 B1 20080423; JP 2007501694 A 20070201;  
JP 4825670 B2 20111130; MX PA06001697 A 20060519; PL 1654052 T3 20081031; WO 2005016495 A1 20050224

DOCDB simple family (application)  
**US 63967803 A 20030813**; AT 04737894 T 20040625; AU 2004264999 A 20040625; BR PI0413459 A 20040625; CA 2004000955 W 20040625;  
CA 2534879 A 20040625; CN 200480011334 A 20040625; DE 602004013333 T 20040625; EA 200600394 A 20040625;  
EP 04737894 A 20040625; JP 2006522856 A 20040625; MX PA06001697 A 20040625; PL 04737894 T 20040625